

Informal Workshop on Draft Regulatory Text for Revisions to Title 14 and 27

Tuesday, October 23, 2012
9:30 AM – 1:00 PM
Cal/EPA Headquarters, Room 350
1001 I Street
Sacramento, CA

Workshop Agenda

1. Introductions
2. Workshop Objectives
3. Issue 7: In-Vessel Digestion
 - Presentation
 - Overview of draft text
 - Draft text: Combination of transfer/processing & compostable materials handling standards
 - Key provisions
 - Definitions
 - Post digestion solids
 - Open discussion
4. Issue 5: POTW Exclusion
 - Presentation
 - Overview of draft text
 - WDR/NPDES standard provision
 - Open discussion
5. Next Steps
6. Adjourn

Workshop Objectives

- Provide overview of initial discussion draft text
- Open discussion

Issue 7: In-Vessel Digestion

Anaerobic digestion (AD) is currently regulated under the Compostable Materials Handling or Transfer/Processing regulations, depending on the nature of the feedstock and how it is handled

Issue 7: In-Vessel Digestion

CalRecycle staff:

Views AD as a process in between Transfer/Processing and Compostable Materials Handling

Intended to develop initial draft regulatory text for AD

Became aware of several in-vessel digestion technologies that do not utilize AD

Proposes to broaden the scope of regulations to cover other types of “in-vessel” digestion activities, including AD

Issue 7: In-Vessel Digestion

CalRecycle staff proposes:

Option 1: A stand-alone, fully-contained set of regulations containing imported transfer/processing and compostable materials handling standards applicable to in-vessel digestion.

Other options considered but not developed include:

Option 2: A stand-alone set of regulations containing cross-references to transfer/processing and compostable materials handling standards applicable to in-vessel digestion.

Option 3: Option 2 plus provide, upon completion of the rulemaking, a fully-contained, non-regulatory guidance document that includes the full text of any cross-referenced standard.

Draft Text: Combination of Transfer/Processing and Compostable Material Handling

Transfer/Processing	Compostable Materials Handling
<ul style="list-style-type: none"> <u>§ Authority and Scope</u> <u>§ Definitions</u> <u>§ Regulatory Tiers</u> <u>§ Excluded Activities</u> § Pre-Digestion Solid Waste § Limited Volume In-Vessel Digestion Operations § Medium Volume In-Vessel Digestion Facilities § Large Volume In-Vessel Digestion Facility § In-Vessel Digestion Facility Plan § In-Vessel Digestion Report § Applicability of State Minimum Standards § Siting On Landfills § General Design Requirements § Cleaning § Drainage Control § Dust Control § Hazardous, Liquid, and Special Wastes § Litter Control § Load checking § Maintenance Program § Medical Wastes § Noise Control § Non-Salvageable Items § Nuisance Control § Parking § Personnel Health and Safety § Protection of Users § Roads § Sanitary Facilities § Scavenging and Salvaging § Signs § Supervision and Personnel § Training § Vector, Bird and Animal Control § Record Keeping Requirements § Documentation of EA Approvals, Determinations, and Requirements § Communications Equipment § Equipment. § Fire Fighting Equipment § Housekeeping § Lighting § Site Attendant § Site Security § Traffic Control § Visual Screening § Water Supply 	<ul style="list-style-type: none"> § Research Digestion Operations § Odor Minimization Plan § Post Digestion Solids Handling § Prohibitions § Sampling Requirements § Maximum Metal Concentrations § Pathogen Reduction § Physical Contamination Limits § Site Restoration

§ 17896.3. Regulatory Tiers Requirements for In-Vessel Digestion Operations & Facilities.

Excluded Tier	Enforcement Agency Notification Tier	Registration Permit Tier	Full Solid Waste Facility Permit
Anaerobically digestible materials at POTW's	Limited Volume In-Vessel Digestion Operation ($< 60 \text{ yd}^3$ or 15 tpd)	Medium Volume In-Vessel Digestion Facility (60 yd^3 or 15 tpd $\leq x < 100 \text{ tpd}$)	Large Volume In-Vessel Digestion Facility ($\geq 100 \text{ tpd}$)
Agricultural material derived from agricultural site & returned to same site ($\leq 1,000 \text{ yd}^3$ given away or sold annually)	Research digestion operations		
In-vessel digestion activities with less than 50 cubic yard capacity			

Key Definitions

§ 17896.2.

“Digestion” means pursuant to PRC 40116.1 the controlled biological decomposition, of organic solid waste that are separated from the municipal waste stream or which are separated at a centralized facility, and that proceeds through one or more of the stages of hydrolysis, acidogenesis, acetogenesis, methanogenesis, and glycolysis.

Digestion includes:

- (A) anaerobic digestion
- (B) fermentation
- (C) aerobic digestion

Key Definitions

§ 17896.2.

“In-vessel digester” is one or more fully enclosed structures in which the entire digestion process occurs, such as in tanks or other sealed containers.

Article 6. Post Digestion Solids

§ 17896.52 Post Digestion Solids Handling.

SUB-SECTION	SUMMARY
(a)	Removed from site within 8 hrs. of removal from digester or air-tight/water-tight enclosed storage container, AND
	Delivered as solid waste to another solid waste facility or operation for disposal. UNLESS
	Incorporated in an aerobic compost process on-site
(b)	Not analyzed or known to exceed limits for metals, pathogens, or physical contaminants – designated for disposal, additional processing through digestion or composting, or other use as approved by state or federal agencies having jurisdiction
(c)	Composted on-site – comply with metals, pathogens, and physical contaminants requirements

Article 6. Post Digestion Solids

§ 17896.53. Sampling Requirements.

SUB-SECTION	SUMMARY
(a)	Post-digested solids – error
(b)	Compost – sample at point where compost is removed from site, bagged for sale, given away, or otherwise beneficially used.
	Analytical results received prior to sampled compost leaving the site.
(c)	Frequency – biosolids (as specified), other (every 5,000 yd ³)
(d)	Composite
(e)	EA-approved alternative method

Article 6. Post Digestion Solids

§ 17896.54. Maximum Metal Concentrations.

SUB-SECTION	SUMMARY
(a)	Compost exceeding limits – designated for disposal, additional processing, or other use as approved by state or federal agencies having jurisdiction
	Sample results received prior to removing product from site
	Post-digested solids – error
	Table 2 – Maximum Acceptable Metal Concentrations
(b)	EA-approved alternative method

Article 6. Post Digestion Solids

§ 17896.55. Pathogen Reduction.

SUB-SECTION	SUMMARY
(a)	Compost – fecal coliform (< 1,000 MPN), <i>Salmonella</i> sp. (< 3 MPN)
	Post-digested solids – error
	Compost exceeding limits – designated for disposal, additional processing, or other use as approved by state or federal agencies having jurisdiction
(b)	Enclosed/Within-vessel – 55 °C (131 °F) for 3 days
	Windrow – 55 °C (131 °F) for 15 days and 5 turnings
	Aerated Static Pile – 55 °C (131 °F) for 3 days
(c)	EA-approved alternative method to (b)
(d)	Temp. monitoring
	EA-approved alternative method

Article 6. Post Digestion Solids

§ 17896.56. Physical Contamination Limits.

SUB-SECTION	SUMMARY
(a)	No more than 0.1% physical contaminants greater than 4 mm (by weight)
	Product exceeding limits – designated for disposal, additional processing, or other use as approved by state or federal agencies having jurisdiction
	Sample results received prior to removing product from site
(b)	Operations – Upon EA request, sample and send to lab
(c)	Facilities – Sample every 5,000 yd ³ and send to lab

Issue 7: In-Vessel Digestion

Open Discussion

Issue 5: POTW Exclusion

POTWs increasingly are considering the addition of organic material such as food waste and fats, oils and grease (FOG) into their digesters to increase volume of biogas production. RWQCB oversight may adequately address the receipt of specific types of organic material for co-digestion.

CalRecycle is proposing the following exclusion:

Excluded Activities

§ 17896.5.

SUB-SECTION	SUMMARY
(a)(1)	POTW that receives vehicle-transported “anaerobically digestible material” for purpose of co-digestion is excluded IF:
(a)(1)(A)	POTW is in compliance with WDRs or NPDES Standard Provision
(a)(1)(B)	For purpose of this exclusion, “anaerobically digestible material” means: inedible kitchen grease (a.k.a. FOG), food material, and vegetative food material
(a)(1)(C)	CalRecycle, in consultation with SWRCB and CDFA, will review and consider approval of other material types under this exclusion
(a)(1)(C)1	Process for review and approval of other material types
(a)(1)(C)2	Other approved material types must meet (a)(1)(A) prior to receipt

Proposed Revision to WDR/ NPDES Permit Standard Provision

“If the Discharger receives hauled in anaerobically digestible material for injection into an anaerobic digester, the Discharger shall notify the Regional Board and develop and implement standard operating procedures (SOPs) for this activity. If receipt of the hauled in waste for digestion is already ongoing, the SOPs shall be developed within ninety (90) days. Otherwise they shall be developed prior to initiation of the hauling. The SOPs shall address material handling including: unloading, screening or other processing prior to anaerobic digestion, and transportation; spill prevention; spill response; avoidance of the introduction of materials that could cause interference, pass through, or upset of the treatment processes; avoidance of Prohibited material, vector control; odor control; operation and maintenance; and the disposition of any solid waste segregated from introduction to the digester. The Discharger shall provide training to its staff on the SOPs and shall maintain records for a minimum of 3 years for each load received, describing the hauler, waste type, and quantity received. In addition, records shall be maintained for 3 years for the disposition location and quantity of cumulative pre-digestion segregated solid waste hauled off-site.”

Issue 5: POTW Exclusion

Open Discussion

Next Steps

Information on the Rulemaking Process

Compostable Materials, Transfer/Processing Rulemaking

<http://www.calrecycle.ca.gov/Laws/Rulemaking/Compost/default.htm>

CalRecycle: Compostable Materials, Transfer/Processing Rulemaking Listserv

<http://www.calrecycle.ca.gov/Listservs/>

Send Written Comments to: compost.transfer.regs@calrecycle.ca.gov.

Staff contact: Ken Decio at (916) 341-6313 or Ken.Decio@CalRecycle.ca.gov

Adjourn